19980126.ba v01_n892.bam.980126 v01_n893.bam.980126

>From ???@??? Mon Jan 26 06:13:17 1998
Message-Id: <199801260730.BAA07859@sco.theporch.com>
Date: Mon, 26 Jan 1998 01:30:14 CST
Subject: BOATANCHORS digest 1892

BOATANCHORS Digest 1892

Topics covered in this issue include:

1) Re: Zero Bias Tubes
   by Morris Odell <morriso@vifp.monash.edu.au>
2) Re: What's all this re-forming stuff, anyhow?
   by Ho4bart <Ho4bart@aol.com>
3) odd RF-coil or xfmr
   by Ho4bart <Ho4bart@aol.com>
4) Re: WTB Supreme Publication
   by Jim Waits <jimwaits@emcst.com>
5) Frontier Cap. ?
   by w4bld@juno.com (Robert B. Kerby)
6) Re: What's all this re-forming stuff, anyhow?
   by "Mike B. Feher" <n4fs@monmouth.com>
7) BUD LF-601...
   by Ken Gordon <keng@uidaho.edu>
8) WTB VLF RX
   by "Don L. Davis" <dxguy@earthlink.net>
9) Re: vinyl covers
   by jackiv@juno.com (John M Iverson)
10) BUD LF-601 instruction sheet...
   by Ken Gordon <keng@uidaho.edu>
11) Heath SA2040 FT
   by "Walter L. Marshall" <wmarshal@CapAccess.org>
12) Re: B&W 850A needed
   by davidh@getnet.com
13) Re: Zenith TO
   by Scott Robinson <spr@earthlink.net>
14) Re: What's all this re-forming stuff, anyhow?
   by Scott Robinson <spr@earthlink.net>
15) Re: What's all this re-forming stuff, anyhow?
   by Scott Robinson <spr@earthlink.net>
16) rack shelves
   by bdhall@ghg.net (Benjamin D. Hall)
17) Need Books
   by n4bno@juno.com (James R Bridgers)
18) Radio Research Paper - Edition III
   by Jerry Proc <jproc@idirect.com>
19) Re: Zenith TO

by "Larry Johnson" <k5yf@wt.net>
20) Select-O-Ject
by hikrbikr@erols.com
21) PRM-10, HA-8, Misc FS
by don merz <71333.144@compuserve.com>
22) Drake R-4 T-4X MS-4 info.....
by KG9IL <KG9IL@aol.com>
23) NC-100XA questions
by Ron Hershey <rhershey@europa.com>
24) Re: [Johnson] WTD: Manual/Instruction Sheet for 250-20 Low Pass Filter
by Edward Zeranski <ejz@nosc.mil>
25) Re: Pohleece cah & the DC4
by w7ni@teleport.com (Stan Griffiths)

Date: Mon, 26 Jan 1998 09:31:36 +1100
From: Morris Odell <morriso@vifp.monash.edu.au>
To: boatanchors@sco.theporch.com
Subject: Re: Zero Bias Tubes
Message-ID: <34CBBD48.E8A@vifp.monash.edu.au>

FRANKK6NL wrote:

> The first single grid zero bias tube, when thinks about it, was the old 75
> audio amplifier. It had a u of 100 and combined zero bias with very good AF
> gain as a resistance coupled amplifiera. All of its descendents 6SQ7,6AT6,etc
> continued that 100 u.

I remember these sorts of tubes being called "space charge biased". The cathode was grounded and the grid returned to ground through a high value resistor of about 10 Meg. The grid actually ended up with a negative bias of a volt or two that way, as a result of a little bit of grid current or somesuch. Can anyone elucidate the exact mechanism?

73 de Morris VK3DOC

Date: Sun, 25 Jan 1998 17:44:40 EST
From: Ho4bart <Ho4bart@aol.com>
To: boatanchors@theporch.com
Subject: Re: What's all this re-forming stuff, anyhow?
Message-ID: <d451537a.34cbc05a@aol.com>

well, there's the whole story on the procedure. but as one who sometimes

doesn't turn on a less used equipment for long spell, the whole subject
of cranky failing lytics makes me nervous.
i was at my brother's recently, he builds / installs speakers in the palaces
of the superrich, and i was looking at some crossover components.
he had a bunch of 10 uF 400vdc 'poly' capacitors. these were something
like a 2 x 3/4 inch cylinder. now here's a capacitor, i thot; apply voltage
10 years later and it's ready for action. some military receiving equipment
doesn't use filter caps of much more than this, maybe paralleling 2; on the
other hand maybe this wasn't the best example cuz these that are AC
powered usually have oil caps. but paralleling some of these does get you
into commercial gear filtering capacitor specs.
these things are pretty pricey in low count compared to the current small
import lytics. you have to buy a pretty good quantity to get a break. i
think next time be buys a pile i will spring for some too.
hue

Date: Sun, 25 Jan 1998 17:53:57 EST
From: Ho4bart <Ho4bart@aol.com>
To: boatanchors@sco.theporch.com
Subject: odd RF-coil or xfmr
Message-ID: <436fdcfe.34cbc287@aol.com>

i found this odd coil thing recently: it is in a metal shield
open at top and bottom. a coil about 3/4 inch diameter
inside, with a pot core inside, with a winding in it too.
at the top end of the coil, inside the coil, is a ?brass?
solid ring, which resembles a torroid core, this just to say
it's pretty solid, not just a single brass wire. this ring
rotates like a variometer, has a draw string pulley attached
to its axis, and when parallel to the plane of the coil below
it, does not intersect the coil at all, only when rotated
does it tip into the coil. what would this gizmo have been
used for, and is that ring brass or what?
tnx hue

Date: Sun, 25 Jan 1998 17:00:37 -0600
From: Jim Waits <jimwaits@emcst.com>
To: hovda@fyiowa.infi.net
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: WTB Supreme Publication
Message-ID: <34CBC415.64110D90@emcst.com>

----------7CFEB769ED95D81DAF8B28C2

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi, I have some old (early twenties) radio magazines and catalogs.
I would like to list them maybe in the ebay listings. Need a little
help with that.. Does the price listed mean minimum? or just what
does it mean?
I could not find the book referenced below or any book or magazine
catagory. Where would these things be listed? Little help please.
Perhaps there is a better place to list these?

Jim Waits, W4ROM for 47 years Email jimwaits@emcst.com
Home Page http://www.emcst.com/pub/jimwaits/jimmy.htm
Fish Camp Owner on Choctawhatchee River at 30-25-50N----85-58-59W
Mail: 242 Rooks Bluff Rd., Bruce, FL 32455-4216 Phone 850-835-2514
>>>>>>>>>>>>>>
Mark Hovda wrote:

> George,
>
> If you have not checked eBay yet, there is a 1955 Most Often Needed that
> just showed up. It is usually best to wait until the last day of the
> auction to bid on items, this sometimes reduces the bidding wars. It is
> currently at $5.
>
> It is at:
>
> http://iguana.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=4914218
>
> CUL,
>
> Mark
> N0JWI
>
> George T Folse wrote:
> >
> > All,
> > I am trying to complete my collection of Most Often Needed Radio
> > Diagrams by Supreme Publication. The years that I have are
> > 1926-1938,1939,1940,1941,1942,1946,1948, and1950. I need the others to
> > complete my collection. I am looking for originals not copies.
> > Thanks,
> >
> > George Folse III KB5WWO kb5wwo@juno.com
> > 630 Dolhonde St.
> > Gretna,La. 70053
> > 504-362-1896 ph/fax
> > Collector of Johnson,Heath,& Atwater Kent AMI#937

----------7CFEB769ED95D81DAF8B28C2
Content-Type: text/html; charset=us-ascii
Content-Transfer-Encoding: 7bit

<HTML>
Hi, I have some old (early twenties) radio magazines and catalogs.

I would like to list them maybe in the ebay listings. Need a little

help with that.. Does the price listed mean minimum? or just what

does it mean?

I could not find the book referenced below or any book or magazine

catagory. Where would these things be listed? Little help please.

Perhaps there is a better place to list these?

<P>Jim Waits,   W4ROM for 47
years
Email   jimwaits@emcst.com

       Home Page   <A HREF="http://
www.emcst.com/pub/jimwaits/jimmy.htm">http://www.emcst.com/pub/jimwaits/
jimmy.htm</A>

  Fish Camp Owner on Choctawhatchee River at 30-25-50N----85-58-59W

Mail: 242 Rooks Bluff Rd., Bruce, FL 32455-4216 Phone
850-835-2514

  >>>>>>>>>>>>>>

Mark Hovda wrote:
<BLOCKQUOTE TYPE=CITE>George,

<P>If you have not checked eBay yet, there is a 1955 Most Often Needed
that

just showed up.   It is usually best to wait until the last
day of the

auction to bid on items, this sometimes reduces the bidding wars.
It is

currently at $5.

<P>It is at:

<P><A HREF="http://iguana.ebay.com/aw-cgi/eBayISAPI.dll?
ViewItem&item=4914218">http://iguana.ebay.com/aw-cgi/eBayISAPI.dll?
ViewItem&item=4914218</A>

<P>CUL,

<P>Mark

N0JWI

<P>George T Folse wrote:

>

> All,

>   I am trying to complete my collection
of Most Often Needed Radio

> Diagrams by Supreme Publication. The years that I have are

> 1926-1938,1939,1940,1941,1942,1946,1948, and1950. I need the others
to

> complete my collection. I am looking for originals not copies.

> Thanks,

>

> George Folse III KB5WWO kb5wwo@juno.com

> 630 Dolhonde St.

> Gretna,La. 70053

> 504-362-1896 ph/fax

> Collector of Johnson,Heath,& Atwater Kent AMI#937</BLOCKQUOTE>

<P> </HTML>

----------7CFEB769ED95D81DAF8B28C2--

Date: Sun, 25 Jan 1998 19:09:14 EST
From: w4bld@juno.com (Robert B. Kerby)
To: boatanchors@theporch.com
Subject: Frontier Cap. ?
Message-ID: <19980125.193508.5023.35.W4BLD@juno.com>

Does anyone have the address and telco number for this service? Thanks.
Bob
- -
Robert B. Kerby - w4bld@juno.com
PO Box 991 (231 Rosser Avenue)
Waynesboro, VA 22980 (540) 942-4356
Collect: Morrow, Gonset, Elmac

_____
You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at http://www.juno.com
Or call Juno at (800) 654-JUNO [654-5866]

Date: Sun, 25 Jan 1998 19:14:04 -0800
From: "Mike B. Feher" <n4fs@monmouth.com>
To: <AAFRadio@erols.com>, "Old Tube Radios" <boatanchors@theporch.com>
Subject: Re: What's all this re-forming stuff, anyhow?
Message-ID: <199801260013.TAA10478@shell.monmouth.com>

For years I have used an old Aerovox (1935 vintage) capacitance bridge for re-forming. The bridge is able to measure capacitance under rated voltage and to that end has a built in current limited variable power supply with a meter that can measure terminal voltage as well as current. I typically start out with applying about 6 ma in the early stages of re-forming and observe whether or not the current decreases. If it does (hopefully) then after the terminal voltage reaches about 100 or so volts I decrease the re-forming current to 3 ma to prevent capacitor heating. Then I just leave the set up alone, come back to it every so often and adjust the voltage to raise the current to 3 ma again until the DC operating voltage of the capacitor is reached at which point the leakage current is typically less than 1 ma. It is not unusual, and even expected, that the higher capacitor values, like 100 mfd at 600 VDC will still have a residual leakage of several milliamps. Capacitors in the range of 20 mfd at 600 VDC should end up with about 1/2 ma or so. All this, by the way, being done with the capacitor totally out of circuit. I wonder if Bob Pease would object to our use of " What's all this ***** stuff, anyhow". 73s - Mike

Mike B. Feher, N4FS
89 Arnold Blvd.
Howell, NJ, 07731
732-901-9193

Date: Sun, 25 Jan 1998 16:36:42 -0800 (PST)
From: Ken Gordon <keng@uidaho.edu>
To: boatanchors@sco.theporch.com
Cc: baswaplist@foothill.net
Subject: BUD LF-601...
Message-ID: <Pine.BSF.3.95.980125163519.5097B-100000@piobaire.mines.uidaho.edu>

I have scanned the instruction sheet and will post it to my web page at

http://www.mines.uidaho.edu/~keng/LF601/

Ken W7EKB

Date: Sun, 25 Jan 1998 17:46:34 -0800
From: "Don L. Davis" <dxguy@earthlink.net>
To: boatanchors@theporch.com
Subject: WTB VLF RX
Message-ID: <34CBEAAC.39A1@earthlink.net>

A good friend of mine is looking for a good VLF RX to do some serious LW beacon DXing. Radio must work well, superhet with narrow CW filter, with PS & speaker (preferred). He is especially looking for an R392 (to be used with a converter that he will buy) or R648/ARR41. He has a total budget of only $200 (we've all been there in our careers), so please keep that in mind. He's not looking for a cosmetic "beauty" but has limited technical/repair capability, so operation is foremost.

Please respond directly to him with as much info as you can supply. He has been "bitten" pretty well by the DX bug, so perhaps someone can help with the grand obsession?

Respond to: Kevin at LWDXER@juno.com

Thanks & 73s

PS I'm posting this to several NGs, so delete if you get more than one (like I always get - hi!).

Date: Sun, 25 Jan 1998 18:35:26 CST
From: jackiv@juno.com (John M Iverson)
To: mccollum@ssdevo.ENET.dec.com
Cc: boatanchors@theporch.com
Subject: Re: vinyl covers
Message-ID: <19980125.184131.3286.0.jackiv@juno.com>

old fashioned flannel works best, buy a gift for the XYL and perhaps she will help jack (it works for me)
Jack Iverson K0EWU jackiv@juno.com

On Sun, 25 Jan 98 11:35:11 MST Pete McCollum 25-Jan-1998 1130 -0700 <mccollum@ssdevo.ENET.dec.com> writes:
>I would not use vinyl on anything that matters.
>Vinyl "out-gasses" over time, and may discolor knobs or cabinets.
>It can also become 'sticky' - in college, many of us used those

>vinyl book covers. Well, I left those covers on my books for several
>years, and they ruined the books' original covers.
>
>Use a type of plastic that is 'archival safe'. As I recall,
>polyethylene is OK. Don't use PVC, oranything with 'vinyl' in
>the name...
>
>An art supply store will have the right stuff.
>
>Pete
>

Date: Sun, 25 Jan 1998 17:13:05 -0800 (PST)
From: Ken Gordon <keng@uidaho.edu>
To: boatanchors@sco.theporch.com
Cc: baswaplist@foothill.net
Subject: BUD LF-601 instruction sheet...
Message-ID: <Pine.BSF.3.95.980125171151.6114A-100000@piobaire.mines.uidaho.edu>

is available at:

http://www.mines.uidaho.edu/~keng/LF601/

Printable.

Ken W7EKB

Date: Sun, 25 Jan 1998 20:31:27 -0500 (EST)
From: "Walter L. Marshall" <wmarshal@CapAccess.org>
To: boatanchors@theporch.com
Subject: Heath SA2040 FT
Message-ID: <Pine.SUN.3.91-FP.980125202539.7595B-100000@cap1.capaccess.org>

Heath, 2KW SSB, 1KW CW, tuner. Decent condx, not beat up, not pristine. Scratches on top. Medium rare to find (Re: WA7ZZE.) Holding out for a trade, but will consider cash, if good trade isn't available. A nice tuner, but I don't have the QRO to go with it.

What I want is old stuff. Especially regens. Will throw in cash for something nice.

Whatcha got?

Lon, KB3BVY

Date: Mon, 26 Jan 98 01:50:09 +0000
From: davidh@getnet.com
To: "Boatanchors" <boatanchors@sco.theporch.com>,
        "Ronnie Hull" <larebel@ms1.nwla.com>
Subject: Re: B&W 850A needed
Message-ID: <199801260150.SAA10142@getnet.com>

Hi Ronnie - I used one in a homebrew 4-1000 that I built about 6 years ago. The Lucite separating the turns had disintegrated but I was still able to get a replacement from B&W. Additionally they had mad a different coil which included 160 meters but still fit the same frame so if you get one and have to rebuild it, it is something to consider. Their was one unused position on the bandswitch which is used for 160. The retrofit coil also came with the extra contact for the switch. It was a bit of a job to rebuild but not impossible. Cost was around $60 in 1992.

Good luck

Dave Hollander N7RK

****
*

Dave N7RK - Webmaster CADXA
Phoenix, Arizona   *DXCC Honor Roll*   *WAZ#23 - 75 Meter SSB*

ex-N7RK/ZB2, VK2ERK, ZM0AJN, WB6NRK, WN6IWX

Boatanchor Collector Extraordinaire preferring Hallicrafters, National and what ever else looks interesting!

```
                                  \\-//
davidh@getnet.com                 (o!o)
http://www.getnet.com/~davidh
-----------------------------ooOO-(_)-OOoo--------------------------------
-
E-Mail Address                                          My Home Page
```

Visit the Central Arizona DX Association Home page --- http://cadxa.org

---

Date: Sun, 25 Jan 1998 17:56:08 -0800
From: Scott Robinson <spr@earthlink.net>
To: Boatanchors@theporch.com
Subject: Re: Zenith TO
Message-ID: <v03007804b0f19c0e6c77@[153.34.140.196]>

>Howdy Men
>
>well, the little Zenith Trans-Oceanic followed me home today. The
>first letter of the model number is difficult to read, but what I can
>read is G005YT.... So I know I need one of those. Anyone know where a
>schematic can be had? This little beaurty has ALL of the accessories
>in the back. The only thing, cosmetically speaking, that will need
>replacing is the plastic dial cover.. it is yellow and shrinking up.
>
>thanks in advance y'all
>
>Ronnie

Ronnie,

This is an 8G005YT, which usese Loktals and therefore no scarce 1L6. AES has all these tubes. Schematic is in Sams set 53, folder 27. Try local library ref room or older radio/TV shop for a copy.

This one has push-pull audio output (say "Oooohhh..!") but won't get most of the WWV frequencies (grumble grumble) as it does BC and SWBC bands in bandspread form only. Nice radio, though.

I have appended a dial cover source. I haven't used him myself.

Doyle Roberts
HC63, Box 236-1
Clinton, AR 72031
501.745.6690

Good luck!

Scott Robinson
spr@earthlink.net

Junque is GOOD for you!

Date: Sun, 25 Jan 1998 18:01:48 -0800
From: Scott Robinson <spr@earthlink.net>
To: boatanchors@theporch.com
Subject: Re: What's all this re-forming stuff, anyhow?
Message-ID: <v03007805b0f19e06e305@[153.34.140.196]>

Bob wrote:
>
>I've got a couple of questions about the art of re-forming capacitors which
>I can't remember being addressed in previous discussions here...
>
>What is the failure mechanism, and is is permanent? In other words, will an
>electrolytic be ruined by the application of full working voltage prior to
>re-forming? I would be more disciplined about re-forming first if I knew
>that applying full voltage could cause irreversable damage...and as you've
>probably guessed, this isn't a hypothetical question!

****As far as I know, the failure mechanism is that teh very high leakage current heats the capacitor and boild the electrolyte before it has a chance to finish re-forming. This is the reason for to limit the current. I keep forming current below 20 mA or so, as a purely arbitrary rule of thumb.
>
>What percentage of caps can be reclaimed by re-forming? From my experience,
>most have to be replaced anyway, but there's a good possibility I've been
>doing it wrong.

*****I went through my entire 'lytic collection a year or two ago and formed all as would. To my surprise, a couple of Sprague NOS units wouldn't form even after 24 hours. MOst of the rest (75%) did, and they had mostly been sitting for between 10 and 30 years.

Regards,

Scott Robinson
spr@earthlink.net

Junque is GOOD for you!

Date: Sun, 25 Jan 1998 18:08:22 -0800
From: Scott Robinson <spr@earthlink.net>
To: boatanchors@theporch.com
Subject: Re: What's all this re-forming stuff, anyhow?
Message-ID: <v03007806b0f19f57322a@[153.34.140.196]>

>On Sun, 25 Jan 1998, Robert Nickels wrote:

>I've got an even more elementary question: During the reform process,
>I assume the tubes are left in their sockets. Can any damage occure
>to the tubes due to the low voltages? I believe I've read on here
>that some filaments encounter problems if below-specified-voltage
>is run through them.

And Scott sez:

I wouldn't run tubes at very low heater voltages for a long time like 24 hours, and here's why:

No tube contains a perfect vacuum. The gas molecules get ionized by the electric field of the plate voltage and teh electrons head for the plate while the ionized atoms are atracted to the cathode. Normally the cathode is surrounded by a large cloud of electrons, which prevent the ionized atoms from striking the cathode and damaging it. However, if you use all the current the cathode can deliver, due either to very high current or low cathode temperature, this protection isn't there and cathode damage occurs. This isn't instant death but 24 hours seems like 'way too long to me. I'd do it for maybe 30 minutes tops.

Regards,

Scott Robinson
spr@earthlink.net

Junque is GOOD for you!

Date: Sun, 25 Jan 1998 20:19:59 -0600

From: bdhall@ghg.net (Benjamin D. Hall)
To: BoatAnchors@SCO.ThePorch.Com
Subject: rack shelves
Message-ID: <3.0.32.19980125201833.006f2350@mailman.ghgcorp.com>

Greetings all...

About 6 months ago, I acquired an 8 foot tall rack from a Western Union Telephone microwave relay station. After getting it into place, I've slowly begun loading it with boatanchors.

But, the problem, as most rack owners know, is that it is tough to load/unload heavy, heavy BA's from rack equipment, as you have to hold it with one hand, while installing/removing front panel mounting screws with the other.

My small 4 foot rack has little shelves, so gear slides in and out easily. While working on the computer, I figured an easy way to add shelves to my 8 foot rack, without modifying it, or the radios: Obtain two backets used to hold up shelves and closet hanger rods. Attach the brackets to the *rear* side of the angle iron that the front panels mount to, using screws that thread into the rear of the holes where the front panel screws would go. Cut the protuding ends of the screws so that they are flush with the surface. Add a board, and you now have a little shelf, inside the rack, suitable for placing heavy gear on. (the brackets I bought at Home Depot are load rated for 50 lbs each, and are exactly the height of a 390!) As the brackets are on the rear side of the iron, and of narrow width, they don't narrow the width of the rack that much, and I imagine they could be stacked, one on top of the other, to make a rack full of shelves to put gear on. For extra security, you can carefully select the thickness of the board so that the front panel holes of the rig line up with the unused threaded holes in the angle iron, and install screws. But the board takes the brunt of the weight, so loading and unloading is easy...

This idea is too simple for me to be the first person to think of it - anyone else tried this?

Thanks and 73,
Ben

Benjamin D. Hall, KD5BYB, Engine and radio collector / operator.
Located in Houston, Texas, USA.
e-mail: BDHall@ghg.net, web: http://www.ghgcorp.com/bdhall.
"An ye harm none, do what ye will."

Date: Sun, 25 Jan 1998 21:30:34 EST

From: n4bno@juno.com (James R Bridgers)
To: boatanchors@sco.theporch.com
Subject: Need Books
Message-ID: <19980125.213345.18174.0.n4bno@juno.com>

Hello All,
I am looking for a couple of books that may help me repair my radio equipment. These books are by Abraham Marcus and the titles are:

1. ELEMENTS OF RADIO

2. RADIO SERVICING: THEORY AND PRACTICE

Or perhaps someone may know of some better publications that will help me learn to troubleshoot my equipment both transmitters and receivers. If anyone can help please reply by direct email to: n4bno @juno.com.

Thank you very much for your time and effort.

Rodney Bridgers

Date: Sun, 25 Jan 1998 21:50:51 -0500
From: Jerry Proc <jproc@idirect.com>
To: boatanchors@theporch.com
Subject: Radio Research Paper - Edition III
Message-ID: <34CBFA0B.333F@idirect.com>

Dear BA'ers,

I've just completed the conversion of my radio research paper titled 'Radio Systems Aboard HMCS HAIDA' so it's 'Web viewable'. This work covers
radio communications in the Royal Canadian Navy from the beginning to the present with particular focus on the 1950's and 60's. Included are personal stories and recollections from those men who actually operated the equipment plus copious amounts of photos, tables and information about the equipment itself.

I apologize for a few of the graphics which may not be of the best quality but they are good enough for the time being and I will strive to improve on them at some later date. The main problem is the inability to convert from Wordperfect WPG format (vector graphics) to GIF or JPG without incurring an *unacceptable* loss of resolution and quality. To expedite the process, I simply scanned some the hard copy.

There is more good news. Unlike the previous edition (II) which was only

available in hardcopy form and cost $money$, this version is FREE for the taking and I *KNOW* that everyone likes a freebie! The URL is:

http://www3.sympatico.ca/hrc/haida/radio/rrp/toc.htm

You can read or print the document a chapter at a time. That way, it can be digested in bite-size pieces. In the event that any errors are discovered, please do let me know so they can be corrected. The document was checked using Netscape 3.0 only so I hope there are no anomolies in my coding which will upset other browsers. It took about two months of work to add the HTML code and redo a multitude of tables from the original 435 kb Wordperfect document. For the time being, the job is complete and a vision that was realized nearly two years ago has been fulfilled.

My other research paper titiled "ASDIC, Radar and IFF Systems Systems ABoard HMCS HAIDA" has been on the Web since May 1997 so I'm re-announcing it for those who were not BA members at that time. The document discusses ASDIC/radar and IFF equipment used by the Royal Canadian Navy from the outbreak of World War II to the late 70's and 80's. Included is oral history, equipment descriptions and recollections from those who actually operated the equipment during the war. Of special interest, is the story which documents the difficulties experienced by Canadians in developing suitable naval radar during the war. Another freebie for the taking. The URL for this paper is :

http://webhome.idirect.com/~jproc/sari/sarintro.html

--
Regards,
Jerry Proc VE3FAB jproc@idirect.com
Web: http://www3.sympatico.ca/hrc/haida/radio/rrintro.htm
HMCS HAIDA Naval Museum, Toronto Ontario

Date: Mon, 26 Jan 1998 04:09:06 -0000
From: "Larry Johnson" <k5yf@wt.net>
To: <w5sum@ms1.nwla.com>
Cc: "Boat Anchors" <boatanchors@theporch.com>
Subject: Re: Zenith TO
Message-ID: <01bd2a10$250882c0$319a8bce@k5yf.wt.net>

Congrat's on your TO. I happen to be a fan of them, have restored a couple of them. Dick already gave you a lot of info, I'll add a couple of things from a practical perspective. One is you ought to get a copy of the book Dick mentioned, well worth having, very well done, and lots of excellent

info...plus just plain interesting reading. You can get it from Antique Electronics Supply for aboutr $25 I believe. Secondly, check with AES for tubes and schematics....was able to get both for an H500 which I restored although that is a later version.

Larry Johnson, K5YF
Houston, Texas USA
e-mail: k5yf@wt.net

Date: Sun, 25 Jan 1998 16:33:04 +0000
From: hikrbikr@erols.com
To: Boatanchors <boatanchors@theporch.com>
Subject: Select-O-Ject
Message-ID: <34CB6940.5139@erols.com>

I don't have one, but my copy of the National NC-183D manual (purchased from The Manual Man) contains instructions, parts list circuit diagram, and performance curves for the Select-O-Ject. R-5A & B is a dual section 2.5 Megohm variable resistor. It corresponds to R-12A & B in the Select-O-Ject schematic shown on page 134 of the 1958 ARRL handbook.

Mike Steussy AE4R
Vienna VA

Date: Sun, 25 Jan 1998 23:12:28 -0500
From: don merz <71333.144@compuserve.com>
To: boatanchors@theporch.com
Subject: PRM-10, HA-8, Misc FS
Message-ID: <199801252316_MC2-30A1-8F18@compuserve.com>

Vintage Radio Gear For Sale

CONTACT: Don Merz, N3RHT: 47 Hazel Drive, Pittsburgh, PA 15228.
412-234-8819 (weekdays, EST or leave a message anytime).
71333.144@compuserve.com

Military AN/PRM-10 grid dip meter. Covers 2mc-400mc. Complete with all coils in brand new condition inside and out. It has a couple minor

blemishes but you will look hard to find them. Working as designed. A fine machine. $85

Hallicrafter HA-8 Splatter Guard. Neat shack accessory. Case paint has scratches. The front panel has some very light scrtaches. Overall this should clean up and look very good. Untested. This used a coupler device which I do not have (but which is simple to make). As-is. $45

Knight C-577 Compressor Preamplifier. Simple mic compressor. Knob style matches Knight T-150 TX but panel has blue highlight. The cabinet is green--this thing is UHHGLEE! With original manual. Untested. Complete. Original. $14

Weston Model 525 DB meter. Oddly-packaged meter with 2 binding posts for connection and Western Electric inspection stamps all over it. The scale is on a window that you look through. It has a WE Co. part number on it: KS-19233LI. Strange bird. Untested. As-is. $15

HP 410B VTVM original Operating and Service Manual. For S/N 21434 and above. Good. $14 PPD

Heathkit T-3 Signal Tracer original manual. Stain on front cover. With oversize drawings. $10 PPD

Military C-1306/GRA-14. This is a control box used in a teletype communication unit that used a BC-610/BC-614 in combination with an R-388. The box switches the teletype and phone lines between one local and 2 remotes. Someone started to modify this thing but did not drill any holes--they just removed 2 toggle switches and started some wiring changes. Anyway, I was going to restore it and use it here but I need a copy of the applicable pages from the GRA-14 manual. Also if anyone wants this more than I do, I'd sell it for $15. The contract number is 7471-PHILIA-54.

WANTED

Manual or copy for Heathkit IB-28 Impedance Bridge.

CONTACT: Don Merz, 47 Hazel Drive, Pittsburgh, PA 15228
412-234-8819 (weekdays, EST)
Internet: 71333.144@compuserve.com

Date: Mon, 26 Jan 1998 00:22:54 EST
From: KG9IL <KG9IL@aol.com>
To: boatanchors@theporch.com
Subject: Drake R-4 T-4X MS-4 info.....
Message-ID: <a6a1d241.34cc1db0@aol.com>

Hey Gang,

Just acquired the above combo today with original manuals.....allegedly in

working condition.....front panels excellent.....insides dirty but not rusty.....cabinets need repaint.....I have questions..I'm a Heathkit guy.....What are they worth???....any rare tubes (besides the 6HS6) ????.....good rig...bad rig??? you guys know...the usual questions.....I appreciate any comments...

Kevin KG9IL

Date: Sun, 25 Jan 1998 21:49:40 -0800
From: Ron Hershey <rhershey@europa.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: NC-100XA questions
Message-ID: <34CC23F4.AF111C4F@europa.com>

Greetings all:

I've just started digging into a National NC-100XA that I recently purchased and I've come up with a few questions that, hopefully, someone who's "been there, done that" can answer for me.

To begin with, the catacomb assembly was hanging up and would not move more than a half inch. After disassembling the case and removing the catacomb assembly I found that an electrolytic capacitor was rubbing against one of the catacomb pins. Suspecting that this might be a modification to the circuit I went to the diagram found in Rider's volume 14. This shows two 6F6 tubes in a push/pull arrangement driving an external electrodynamic speaker. My radio, however, has a single 6F6 driving an external PM speaker. This appears similar to the output circuitry of the battery powered set. The capacitor causing my problem is a 25 mF/50V electrolytic bypassing the 250 ohm cathode resistor of the 6F6. My question is whether this is a factory variant or a field fix? I'll probably leave the circuit as-is and just install a physically smaller electrolytic but I am curious.

The catacomb slides along a steel rod that goes from side of the chassis to the other. In this set, there are clear plastic sleeves about an inch long on each end of the rod. These appear to be acting as bumpers and are torn up from the catacomb bumping into them. Are these original to the set or are they another field fix? Since I've got the catacomb removed I'd just soon get this taken care of now.

Any suggestions for lubing the rack gear? I cleaned all the petrified grease from the gear and need to replace it. Does the steel rod require

a light coating of grease as well?

I'm sure I'll have more questions as I get into this set. Thanks for any assistance you can give.

Best regards,
Ron Hershey

Date: Sun, 25 Jan 1998 22:14:29 -0800
From: Edward Zeranski <ejz@nosc.mil>
To: "W2OKF" <szachara@gulftel.com>
Cc: boatanchors@theporch.com
Subject: Re: [Johnson] WTD: Manual/Instruction Sheet for 250-20 Low
  Pass Filter
Message-ID: <3.0.1.32.19980125221429.0072a3a0@marlin.nosc.mil>

At 03:22 PM 1/10/98 -0600, you wrote:
>Does anyone have a copy of this Johnson 250-20 Low Pass Filter manual or
>data sheet they could scan and e-mail to me
>Walt, W2OKF
>Walt,
     I have two filters and a data sheet, send a snail address or FAX #. I'm on the road so it will be a week or so if no other source pops up.

Ed Zeranski This is a private opinion or statement.
home email: ezeran@cris.com

Date: Sun, 25 Jan 1998 23:27:53 -0800 (PST)
From: w7ni@teleport.com (Stan Griffiths)
To: polepeeg@aa4rm.radio.org
Cc: boatanchors@theporch.com
Subject: Re: Pohleece cah & the DC4
Message-ID: <199801260727.XAA11201@smtp3.teleport.com>

>
>----well the 1st of the sequence missed the reflector. color
>   my face red------->
>
>Dear Diary
>Dear Debris Mariners @ the Boat Anchorage.
>
>- - - Pohleece cah 60s Moto 2-way & a Drake DC4 - - - -

>
>I had a pal's DC4 on the bench & aside here 4 a month 'cause for 12V 200A
>in there was nothing out.
>
>Big pnp doorknobs checked OK so lotsa other stuff investigated - to no
>avail.
>
>Changed pnp doorknobs with similar units taken fm Pohleece cah 60s Moto 2-way
>and VOILA.
>
>DC4 does normally & can again power a electric shaver in the family cah.
>
>So what satanic possession caused the "checks-good, works-bad effect" in the
>changed-out p-n-ps????
>
> Signed,
>
>   Puzzled
>
>
>... and a Drake DC4 powers the tube tube tube tube tube tube tube tube tube
>   TR3, TR4, TR6, etc. dealusses... as well some little 110V thing that
>   doesn't care re 600 hz AC - like a series-wound Norelco shaver or any TV.

Dear Puzzled,

All I can say is your testing wasn't finished until you substituted in
replacement transistors. So in the final test (sustitution), they checked
out BAD.

Seriously, how did you check them to determine they were "good". I would
normally use a series of ohmmeter checks to make sure all the junctions were
good and there was no leakage from emitter to collector. If I still
suspected them, I would put them in my 575 Transistor Curve Tracer and see
what they look like there. If you send them to me, I will put them in my
575 and let you know what i see . . .

Stan w7ni@teleport.com

End of BOATANCHORS Digest 1892
****

>From ???@??? Mon Jan 26 18:52:24 1998
Message-Id: <199801262135.PAA01137@sco.theporch.com>
Date: Mon, 26 Jan 1998 15:35:18 CST

Subject: BOATANCHORS digest 1893

BOATANCHORS Digest 1893

Topics covered in this issue include:

1) Eimac Newsletters
   by "Don L. Davis" <dxguy@earthlink.net>
2) Antique Telegraph Key Web Page
   by Jim Hill <jshillw6ivw@earthlink.net>
3) Hammarlund Super Pro SP-110SX
   by "Engbert Oord" <Engbert.Oord@jet.uk>
4) Re: B&W 850A needed
   by w7ni@teleport.com (Stan Griffiths)
5) Re: B&W 850A and the 4-1000
   by Ralph Parker <rparker@istar.ca>
6) EV 911
   by "w5sum" <w5sum@ms1.nwla.com>
7) Re: rack shelves
   by "P. J. Rovero" <provero@connix.com>
8) re:Rack Shelves
   by Tom Norris <badger@telalink.net>
9) Re: rack shelves
   by William Donzelli <william@ans.net>
10) RE: BA Vinyl Equipment Covers?
    by Laird Tom N <LairdTomN@JDCORP.deere.com>
11) Re: rack shelves
    by Tom Norris <badger@telalink.net>
12) RE: Need Books
    by Laird Tom N <LairdTomN@JDCORP.deere.com>
13) Re: rack shelves
    by john <johnmb@mindspring.com>
14) Re: rack shelves
    by William Donzelli <william@ans.net>
15) Re: Zero Bias Tubes
    by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
16) Hickock 600 Tube Tester Info
    by "Freeberg, Scott (STP)" <scott.freeberg@guidant.com>
17) Re: selectoject
    by Jack Harper <jharper@bs2000.com>
18) Re: Zenith TO
    by Lenox Carruth <carruth@swbell.net>
19) selectoject pot
    by lee1@digital.net
20) TRADE - Heath catalogs
    by Nick England <nick@cs.unc.edu>
21) Re: BA Vinyl Equipment Covers?
    by Richard Loken <richardlo@devax.admin.athabascau.ca>

22) BA dust covers
    by GIBSON@ASTRA.LBL.GOV
23) RE: NC-100XA questions
    by "Owens, Clarence" <owensc@nebeng.otis.com>
24) Modulation Transformer Wanted
    by "Joseph J. Curry" <jjcurry_trilix@compuserve.com>
25) Re shipping NC-100s and NC200s
    by philip mccoy <dgnova@erols.com>
26) Reflex (not "regen")
    by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
27) BAer visit
    by laffitte@prtc.net (laffitte)
28) Testing 4x150's ?
    by gcr2@po.CWRU.Edu (George C. Rybicki)
29) SB-200 on WARC bands?
    by Lee Blaske <lblaske@pclink.com>
30) RESISTOR IN 6H6 HEATER CIRCUIT, MORE.
    by JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
31) RE-FORMING ELECTROLYTIC CAPS
    by JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)

Date: Mon, 26 Jan 1998 01:21:49 -0800
From: "Don L. Davis" <dxguy@earthlink.net>
To: boatanchors@theporch.com
Subject: Eimac Newsletters
Message-ID: <34CC5591.5A3@earthlink.net>

Kudos to all who were involved in reproducing the Eimac ham newsletters. Just got my copy & It's a real gem! Thanks again & 73s
don davis DXGUY

Date: Mon, 26 Jan 1998 00:29:25 -0800
From: Jim Hill <jshillw6ivw@earthlink.net>
To: boatanchors@theporch.com
Subject: Antique Telegraph Key Web Page
Message-ID: <3.0.5.32.19980126002925.00840740@earthlink.net>

While brousing through Boatanchor Messages, I found somebody who had an interesting telegraph key web site. I added it to my web site list, and continued brousing. Unfortunately, my computer locked up, and I lost it. It was listed at the bottom of a message on another subject. Who are you??

thanks, Jim

Date: Mon, 26 Jan 1998 08:55:52 +0000
From: "Engbert Oord" <Engbert.Oord@jet.uk>
To: boatanchors@theporch.com
Subject: Hammarlund Super Pro SP-110SX
Message-ID: <9801260855.AA03584@jet.uk>

Goodmorning all

Yesterday I acquired what I believe to be a Super Pro SP-110SX (after checking pictures in Raymond S. Moore's book.

There is a PROBLEM however. This radio has been seriously "improved" by one of it's former owners. A.o. it has sprouted such out of era functions as SSB. Some switches moved place, additional controls added.
However the biggest problem is inside. Almost all octal tubes have been replaced by miniatures, the few octals left are "wrong" (6H6, 6SA7, 6AC5). Even some Si diodes have crept in.

Questions :

- would all the original tubes have been of the glass envelope type ? If so which ones would have had shield cans.
- Moore's book mentions 2x 6B7 for AVC and detector. Are only the double diode sections used and the pentode-section left unwired ? If so I might be tempted to use 6H6's instead, which are plentiful, in case I am unable to locate the 6B7's.
- Moore's book mentions 3x 6F6, 2 in p/p, what is number 3 used for.
- Were the octal tube connectors all of the porcelain variety ?
- I have not yet opened the power supply unit, but I would not be surprised to see SI diodes if I did. Which rectifier(s) are used in the power supply ?

Before I can even think of tackling this major restoration job I need a circuit diagram or better still a manual.

Greetings

Date: Mon, 26 Jan 1998 02:03:16 -0800 (PST)
From: w7ni@teleport.com (Stan Griffiths)

To: davidh@getnet.com
Cc: boatanchors@theporch.com
Subject: Re: B&W 850A needed
Message-ID: <199801261003.CAA11893@mail1.teleport.com>

>Hi Ronnie - I used one in a homebrew 4-1000 that I built about 6 years
>ago. The Lucite separating the turns had disintegrated but I was still
>able to get a replacement from B&W. Additionally they had mad a different
>coil which included 160 meters but still fit the same frame so if you get
>one and have to rebuild it, it is something to consider. Their was one
>unused position on the bandswitch which is used for 160. The retrofit
>coil also came with the extra contact for the switch. It was a bit of a
>job to rebuild but not impossible. Cost was around $60 in 1992.
>
>Good luck
>
>Dave Hollander N7RK

I don't think the 850A is big enough for a 4-1000A, ie: yours melted down
and it is not the first I have heard of.

I use a Johnson roller inductor with my pair of 4-1000As and it is still
working after 25 years. Another advantage of the roller inductor is that
you can adjust the inductance to any value you want instead of being stuck
with what B&W chooses for you. You can also adjust it for the WARC bands . . .

Stan w7ni@teleport.com

Date: Mon, 26 Jan 1998 03:26:35 -0800
From: Ralph Parker <rparker@istar.ca>
To: boatanchors@theporch.com
Subject: Re: B&W 850A and the 4-1000
Message-ID: <3.0.5.16.19980126032635.115f8b44@istar.ca>

Stan, w7ni said:
>I use a Johnson roller inductor with my pair of 4-1000As

A PAIR of 4-1000s?
That ain't no boatanchor, baby, thats the whole ship!

I have a Johnson #229-3-2 roller inductor on the shelf
(6.5" long, 4" dia, 6 tpi), would that be big enough?
I always wondered what I would use that thing for.

73, Ralph, VE7XF

Date: Mon, 26 Jan 1998 05:52:10 +0000
From: "w5sum" <w5sum@ms1.nwla.com>
To: boatanchors@theporch.com
Subject: EV 911
Message-ID: <199801261151.FAA21091@ms1.nwla.com>

As luck would have it, the Electro Voice "Mercury" 911 microphone I recently found has a bad element. Can anyone suggest where one might be found? I will call EV today, but I doubt if they will have one, it being so old and all.

I've heard this is a very nice sounding crystal mic, and I would love to put it on my Ranger.

any suggestions fellers?

Ronnie = W5SUM
W5SUM - Ronnie HUll
PO Box 8941
Shreveport, La 71148

Date: Mon, 26 Jan 1998 08:04:42 -0500 (EST)
From: "P. J. Rovero" <provero@connix.com>
To: "Benjamin D. Hall" <bdhall@ghg.net>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: rack shelves
Message-ID: <Pine.BSI.3.95.980126080032.2888A-100000@comet.connix.com>

I use 4 small "L" brackets, mount them to sturdy plywood, and mount them to the "inside" set of holes on the rack.

Have SP-200, SRR-13, R-391 mounted this way.

Only downside is air circulation underneath the R-391, ameliorated with few 1" holes under the audio deck and those hot 6082's. Already have a 12v muffin fan on the side of that module.

P. J. "Josh" Rovero email: provero@connix.com
Oceanographer work: rovero@sonalysts.com
Meteorologist radio: KK1D
Curmudgeon at Large web: http://www.connix.com/~provero/

Date: Mon, 26 Jan 1998 07:12:10 -0600
From: Tom Norris <badger@telalink.net>
To: boatanchors@theporch.com
Subject: re:Rack Shelves
Message-ID: <3.0.3.32.19980126071210.02ec2328@mail1.telalink.net>

I use aluminum angle stock in my rack -- holds up my R390s and stuff, and leaves the bottom open
for ventilation. Even the SRR-13 will fit and be held by the stuff. I have the angle stock running the depth
of the rack.

73

Tom

Date: Mon, 26 Jan 1998 08:15:02 -0500 (EST)
From: William Donzelli <william@ans.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: rack shelves
Message-ID: <Pine.GSO.3.96.980126081106.7155C-100000@titan.purch.ans.net>

OK, this is bothering me...

Why do so few boatanchor radios NOT use rack slides? They make mounting (and removing) so much easier! The minicomputer people figured out slides fairly early in the game, and when a tech needed to replace a 100 pound hard drive, the slides were a blessing!

William Donzelli
william@ans.net

Date: Mon, 26 Jan 1998 07:27:00 -0600
From: Laird Tom N <LairdTomN@JDCORP.deere.com>
To: "'y4562@groupz.net'" <y4562@groupz.net>
Cc: "'BA'" <boatanchors@theporch.com>
Subject: RE: BA Vinyl Equipment Covers?
Message-ID: <0958DD57326BD011813300805FBE98DA026364B9@e90corp2.dx.deere.com>

> Anyone know of a source which supplies custom vinyl covers to help
> keep the
> dust off Boatanchor equipment? Haven't seen any advertisements for
> many
> years in any of the ham or trade magazines. Does anyone know of a
> source?
> Larry Louie

Surplus Sales of Nebraska has some for Collins gear and maybe others. I bought two for my S-line for $7 each.

Tom Laird WC9M Moline, Il
TL39597@deere.com

Date: Mon, 26 Jan 1998 07:29:47 -0600
From: Tom Norris <badger@telalink.net>
To: william@ans.net
Cc: boatanchors@theporch.com
Subject: Re: rack shelves
Message-ID: <3.0.3.32.19980126072947.02ec6ce4@mail1.telalink.net>

If I put slides on my R390's and had to slide one of them out
my rack would tip over since it is not bolted to the floor, and
since I dont have a heavy enough load in the bottom for ballast.

Manufacturors recommendations suggest the rack be permanently
mounted (floor,etc) if the slides are to be used with heavier gear.
(at least the slides I use at work come with that warning)

I think Bobbi posted something to this effect a while back.

73

Tom

At 08:15 AM 1/26/98 -0500, you wrote:
>OK, this is bothering me...
>
>Why do so few boatanchor radios NOT use rack slides? They make mounting
>(and removing) so much easier! The minicomputer people figured out slides
>fairly early in the game, and when a tech needed to replace a 100 pound
>hard drive, the slides were a blessing!
>

>William Donzelli
>william@ans.net
>
>
>

Date: Mon, 26 Jan 1998 08:02:15 -0600
From: Laird Tom N <LairdTomN@JDCORP.deere.com>
To: "'n4bno@juno.com'" <n4bno@juno.com>
Cc: "'BA'" <boatanchors@theporch.com>
Subject: RE: Need Books
Message-ID: <0958DD57326BD011813300805FBE98DA026364BA@e90corp2.dx.deere.com>

> I am looking for a couple of books that may help me repair my radio
> equipment. These books are by Abraham Marcus and the titles are:
>
> 1. ELEMENTS OF RADIO
>
> 2. RADIO SERVICING: THEORY AND PRACTICE
>
> Or perhaps someone may know of some better publications that will help
> me
> learn to troubleshoot my equipment both transmitters and receivers.
> If
> anyone can help please reply by direct email to: n4bno @juno.com.

They are very good books for beginner and intermediate. Try your library, I found
one called "Elements of Radio Servicing" by Marcus and Levy third edition. There are two Marcus' writing books like this, I believe they maybe be brothers, they also wrote similar training books for the military. I found a Navy "how to" book written by a MARCUS.

Tom Laird WC9M Moline, IL
TL39597@deere.com

Date: Mon, 26 Jan 1998 09:18:34 -0500
From: john <johnmb@mindspring.com>
To: badger@telalink.net, boatanchors@theporch.com
Subject: Re: rack shelves
Message-ID: <199801261418.JAA16421@camel14.mindspring.com>

At 07:29 AM 1/26/98 -0600, you wrote:
>If I put slides on my R390's and had to slide one of them out
>my rack would tip over since it is not bolted to the floor, and
>since I dont have a heavy enough load in the bottom for ballast.
>
THIS is a problem!
:-)
Computer mfg's (at least the one I used to work for...) solved this
by putting a slide out "fifth leg" that you could slide out the front to
keep from getting squashed by your favorite BA. These types of racks are
a dime
a dozen in scrap yards (can you say VAX780, or "PDP"... :-))
/John

+---+
|Wanted: Howard Co. receiver/acc'ys/docs |
| AWA-OTB back issues... |
| ----- WB5OAU/4 AMI #24 ----- |
| johnmb@mindspring..com |
+---+

Date: Mon, 26 Jan 1998 09:27:19 -0500 (EST)
From: William Donzelli <william@ans.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: rack shelves
Message-ID: <Pine.GSO.3.96.980126092112.7155F-100000@titan.purch.ans.net>

> Computer mfg's (at least the one I used to work for...) solved this
> by putting a slide out "fifth leg" that you could slide out the front to
> keep from getting squashed by your favorite BA. These types of racks are
> a dime
> a dozen in scrap yards (can you say VAX780, or "PDP"... :-))

Actually, if anyone goes to the scrap yards, look for some goofy extra
wide IBM cabinets (for RS/6000s, AS/400s, etc.). Inside they have
wonderful shelf things. They mount to both the front and back rails,
will hold up several hundred pounds, and use only screws in the back -
the fronts have heavy duty posts that just fit into the racks screw holes,
and do not stick out the front!

And of course, if you see any real old computer junk, call me.

Back to tubes. How 'bout them 807s?

William Donzelli
william@ans.net

Date: Mon, 26 Jan 1998 14:54:41 +2400
From: Bill Jarvis <B.H.Jarvis@hw.ac.uk>
To: morriso <morriso@vifp.monash.edu.au>
Cc: boatanchors <boatanchors@theporch.com>
Subject: Re: Zero Bias Tubes
Message-ID: <199801261454.OAA15618@punt1.hw.ac.uk>

On 1998-01-25 morriso@vifp.monash.edu.au said:
 mo>X-Mailer: Mozilla 3.0Gold (Win95; I)
 mo>X-Listprocessor-Version: 8.1 -- ListProcessor(tm) by CREN
 mo>Status:
 mo>FRANKK6NL wrote:
 mo>> The first single grid zero bias tube, when thinks about it, was
 mo>>the old 75 audio amplifier. It had a u of 100 and combined zero
 mo>>bias with very good AF gain as a resistance coupled amplifiera.
 mo>>All of its descendents 6SQ7,6AT6,etc continued that 100 u.
 mo>I remember these sorts of tubes being called "space charge biased".
 mo>The cathode was grounded and the grid returned to ground through a
 mo>high value resistor of about 10 Meg. The grid actually ended up
 mo>with a negative bias of a volt or two that way, as a result of a
 mo>little bit of grid current or somesuch. Can anyone elucidate the
 mo>exact mechanism? 73 de Morris VK3DOC

When electrons leave the hot cathode they WOULD leave it positively charged, by definition. So the 10 meg grid leak is a "load" through which that + charge can attract the electrons to the grid.

A dynamic equilibrium is set up; as you say, the grid is then a volt or so negative. Electron flow is grid thro' leak to cathode.

Check: They couldn't flow the other way, COULD they!

I thought I explained that quite clearly to our tutor at Oxford in 1959, because I had been taught that by the Royal Air Force (who needed to get these things right). He got very agitated and called me stupid, and gave me gamma minus. That's why I reiterate the explanation here...what's wrong with it?

I deliberately excluded any anode, or other grids, from the initial explanation. That's my excuse and I'm sticking to it.

(Er, doesn't that mean the grid must settle slightly POSITIVE?)

My brain hurts.

Bill
GM8APX, qthr=No 6, EH4 6JY==Cave felem==No Rectangulars=Ikke Hawkering

Silent enim leges sunt inter arma

Net-Tamer V 1.10 - Registered

Date: Mon, 26 Jan 1998 09:46:58 -0600
From: "Freeberg, Scott (STP)" <scott.freeberg@guidant.com>
To: "'Boatanchors@theporch'" <boatanchors@sco.theporch.com>
Subject: Hickock 600 Tube Tester Info
Message-ID: <21B46CBD022AD1118F0500805F15A0681ED2CA@STPMSX05.stp.guidant.com>

Greetings,

I was recently told that Hickock made a model 600 or 605 which was
basically a TV-7 with a rectangular meter. Is this true? Whats a
typical price for one in good operating condition?

73,

Scott WA9WFA Saint Paul Minn

Date: Mon, 26 Jan 1998 09:02:42 -0700
From: Jack Harper <jharper@bs2000.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: selectoject
Message-ID: <3.0.1.32.19980126090242.00a0a578@teal.csn.net>

At 19:26 1/24/98 -0800, Lee wrote:

>> Do you think the author meant .5meg which
>> would seem much more likley(?)
>

I have a National NC-125 receiver (bought it used in 1965 as my first

Novice rig with a DX-35) that has the Select-o-ject feature.

The Frequency Control pot (R-29A/B) is a dual 2.5-meg and the Boost/Reject pots (R-35, R-36) are 500K.

Please let me know if a copy of the operating instructions for the NC-125's Select-o-ject would be helpful and if so I will be happy to mail it to you.

Regards

Jack, W0YJ (Friend to all things Hammarlund)

Jack Harper Bank Systems 2000, Inc.
303-277-1892 Golden, Colorado USA

"21st Century Financial Applications"
Optical Cards for Bank, EBT, and Medical Applications
Visit our Web Page: http://www.bs2000.com/talos (Last Update: 970902)

Date: Mon, 26 Jan 1998 10:20:16 -0600
From: Lenox Carruth <carruth@swbell.net>
To: k5yf@wt.net
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Zenith TO
Message-ID: <34CCB7C0.6449@swbell.net>

Most libraries have Sam's Photofacts and you can photocopy them for very little. That's where I get the schematics for most of the old civilian stuff that I get. In less than an hour of your time, you'll have all the schematics you need plus alignment and service instructions.

--

Lenox

Lenox Carruth, Jr. carruth@swbell.net
Dallas, Texas
Collector of WW-II Communications Equipment and Memorabilia

Wanted: TCS-14 Transmitter, TBX, BD-71, Sextant

Date: Mon, 26 Jan 1998 12:02:12 -0500 (EST)
From: lee1@digital.net
To: BOATANCHORS@theporch.com
Subject: selectoject pot
Message-ID: <199801261702.MAA19806@ddi.digital.net>

Thanks gang for all the good info.
Replacred 5 meg pot with a dual 2.5
meg one and now it works much better.
2.5 megs seems to be the most
agreed upon size and as I had one
around that is what I used.
Again thanks for all the good dope.
73 73 73

Thank the good LORD for all that you have!!!

67yr old semi disabled senior trying to get code speed to 13wpm
(stroke got my eyesight, balance & coordination) SO ONLY BA'S NO SOLID STATE

Leon (lee) Wiltsey 4600 Lake Haven blvd Sebring fl. 33872 KF4RCL TECK+

Date: Mon, 26 Jan 1998 12:04:59 -0500 (EST)
From: Nick England <nick@cs.unc.edu>
To: boatanchors@theporch.com
Subject: TRADE - Heath catalogs
Message-ID: <199801261704.MAA03693@altair.cs.unc.edu>

For TRADE only -
Heath catalogs - 1958, 1960, Fall-Winter 1962-63, 1965, 1968, 1969
all in nice condition

WANTED -
Heath catalogs - 1953, 1955, 1967
Allied catalogs - 1950-54, 1956, 1958-60
Hi-fi magazines and sales literature - late 50's & early 60's

73 & Have Fun,
Nick England KD4CPL nick@cs.unc.edu Univ. Of North Carolina
http://www.cs.unc.edu/~nick Chapel Hill NC

Date: Mon, 26 Jan 1998 10:28:32 -0700 (MST)
From: Richard Loken <richardlo@devax.admin.athabascau.ca>
To: Avery Comarow <acomarow@USNEWS.COM>
Cc: Old Tube Radios <boatanchors@theporch.com>,
        ~richardlo@devax.admin.athabascau.ca
Subject: Re: BA Vinyl Equipment Covers?
Message-ID:
 <Pine.PMDF.3.95.980126102556.541198448A-100000@devax.admin.athabascau.ca>

On Sat, 24 Jan 1998, Avery Comarow wrote:

> Larry, Nebraska Surplus has a whole page in their catalog of custom vinyl
> covers, most of them priced around $9 (but some, like the one for the 75A-4,
> going for $25!). And I've seen somebody posting ads for his covers on

That would be wing emblem, Collins is always worth more, especially wing
emblem and especially at SS of N.

:)

Oh yes, I lured my wife into making me some dust covers out of cloth. That way
you can choose your own pattern but I haven't seen any wing emblem cloth
available at any of the fabric shops.

   Richard Loken VE6BSV, Systems Programmer - VMS
   Athabasca University
   Athabasca, Alberta Canada
   ** richardlo@admin.athabascau.ca **

Date: Mon, 26 Jan 1998 9:52:54 -0800
From: GIBSON@ASTRA.LBL.GOV
To: boatanchors@theporch.com
Subject: BA dust covers
Message-ID: <980126095254.27e009d7@ASTRA.LBL.GOV>

 Go to a fabric store and from their incredible selection buy enough cloth.
If you have access to a sewing machine, it takes minimal skill to sew

straight edges and hems. Lacking these skills you can soft talk or bribe your wife or lover or either to do it for you.
Cloth does a very good job keeping dust out and does not harden or crack after a decade.
I usually glue close mesh bridal veil on the inside of the backs of my table radios to prevent dust leaking in through the open louvres but still the cooling air gets in. This is a factory feature on my british made radios.
If you steam the veil from the spout of a boiling kettle, the cloth will tighten up without a wrinkle.

John Gibson.

Date: Mon, 26 Jan 1998 12:54:00 -0500
From: "Owens, Clarence" <owensc@nebeng.otis.com>
To: Boatanchors Post <boatanchors@theporch.com>
Subject: RE: NC-100XA questions
Message-ID: <0ENEK9DBZ002LP@mailman.otis.com>

Bill Fizette's article in the AWA Old Timer's Bulletin from May, 1988 (Vol 29 No. 1) "Restoring the National Company Sliding-coil Receivers" has the following: "The box has fiber inserts to cushion and insulate it from the rod, and often they are loose or out of the holes. It may be necessary to cement these back in place to keep them there.". He doesn't mention lubrication, but I imagine the fiber inserts would slide OK without any hewvy lubrication, if the rod is in good shape. If you want to contact Bill, his address is:

William B. Fizette, W2DGB
RR 1, Box 55
Henryville, PA 18332

He requests an SASE for replies; he gets a lot of mail about the old communications receivers.

Also, see my posting of Jan 21, "Re: National PW dial removal" for a list of other recent articles Bill wrote on National receiver restoration.

I have a coil tray receiver myself. An NC-200 that I need to look into fixing up someday; it was very nice before I paid in advance to the previous owner, but the pack and ship place he hired did a very poor job of packing and it was badly damaged. All I could get out of the deal without filing an out of state suit against the P&S joint was a partially repaired, VERY expensive radio... Another way to get zapped in the hunt for the elusive BA.

I hope you have success with your NC-100XA

73,

Clare Owens N2RJB
owensc@nebeng.otis.com

Ron Hershey wrote:

Subject: NC-100XA questions
Date: Monday, January 26, 1998 12:49AM

 --snip--

The catacomb slides along a steel rod that goes from side of the chassis to the other. In this set, there are clear plastic sleeves about an inch long on each end of the rod. These appear to be acting as bumpers and are torn up from the catacomb bumping into them. Are these original to the set or are they another field fix? Since I've got the catacomb removed I'd just soon get this taken care of now.

Any suggestions for lubing the rack gear? I cleaned all the petrified grease from the gear and need to replace it. Does the steel rod require a light coating of grease as well?

Date: Mon, 26 Jan 1998 13:27:42 -0500
From: "Joseph J. Curry" <jjcurry_trilix@compuserve.com>
To: Boatanchors <boatanchors@sco.theporch.com>
Subject: Modulation Transformer Wanted
Message-ID: <199801261328_MC2-30BA-444A@compuserve.com>

Fellow BA Enthusiasts:

HELP! Over the weekend the modulation transformer in my 813 rig gave up t=
he
ghost. It developed a short between the primary and secondary...an unusua=
l,
but fatal flaw. A replacement is badly needed.

The transformer that died was a Thordarson 300w multimatch (T21M64). The easiest, but least likely, replacement would be one of these. Barring tha=
t,
I need a transformer rated at 300 watts or better with a primary to secondary turns ratio of 1.4 to 1.5 and the secondary capable of 300+ ma (the transformer was rated at 500 ma and actually "runs" at 250 ma).

Anyone have such a beast hanging around?. The only hitch is that the connections for the transformer must be on the top or sides, not leads or=

terminals coming out the bottom (ala UTC). =

Rely to: jjcurry_trilix@compuserve.com

TNX es 73,

Joe
K3ICO
AMI #721 =

Date: Mon, 26 Jan 98 15:09:04 -0800
From: philip mccoy <dgnova@erols.com>
To: boatanchors@sco.theporch.com
Subject: Re shipping NC-100s and NC200s
Message-ID: <199801261916.OAA27137@smtp2.erols.com>

In shipping NC-100s and variants, the coil rack should be secured. The Navy RAO has provisions for doing this, by use of a screw inserted in the right side of the cabinet, which locks the coil rack to the frame. In domestic versions, you would have to improvise.

Philip McCoy dgnova@erols.com

Date: Mon, 26 Jan 1998 19:47:45 +2400
From: Bill Jarvis <B.H.Jarvis@hw.ac.uk>
To: boatanchors <boatanchors@theporch.com>
Subject: Reflex (not "regen")
Message-ID: <199801261947.TAA24002@punt1.hw.ac.uk>

I've been looking for tips - or complete circuits for a "reflex" receiver. Not the sort which has adjustable reaction at RF, but the sort which uses one valve as an RF stage and again as an AF stage.

I thought I had at least one such circuit in all my reference books but they all turn out to be "regenerative", or circuits with reaction at the one frequency.

I'd welcome a scan, or a verbal description, or pointers to where I can read about them.

I believe a researcher at the (UK) Military Radio Research Centre at Malvern, Worcestershire wrote an entire textbook about them; but I can't find anything of his.

Incidentally I've seen one or two circuits in which what appears to be audio is fed back into the aerial circuit; but I could be misunderstanding a true reflex receiver circuit.

Any other sites anyone can recommend on this subject?

Thanks all -

Bill
GM8APX, qthr=No 6, EH4 6JY==Cave felem==No Rectangulars=Ikke Hawkering

Capax imperii - nisi imperasset

Net-Tamer V 1.10 - Registered

Date: Mon, 26 Jan 1998 15:53:55 -0400
From: laffitte@prtc.net (laffitte)
To: boatanchors@theporch.com
Subject: BAer visit
Message-ID: <34CCE9D3.3C48@prtc.net>

Hi Gang:

  I just had a visit from Paul Bernhardt who is here in PR on job related matters. It was a very pleasant experience to meet with with such a nice person (and his friend Greg). We spent some time in our favorite subject discussing BA adventures and collecting interest. Over here there are no other BA collectors so this was a unique experience. We talked about the scarcity of hamfests here on the island and the difficulties of getting equipment here plus about all the BAs in my shack. As Paul left, I directed them toward a good Cuban(I can't deny my roots!) food restaurant which I hope that they found. I hope we can repeat this again with more time to spare. Thanks Paul!

Best 73s
Guido KP4FAR
BA collector in the tropics

Date: Mon, 26 Jan 1998 15:50:27 -0500 (EST)
From: gcr2@po.CWRU.Edu (George C. Rybicki)
To: boatanchors@sco.theporch.com
Subject: Testing 4x150's ?
Message-ID: <199801262050.PAA05601@kanga.INS.CWRU.Edu>

Is there a way to test 4X-150's on a common tube tester, say a TV7 or tv10? I have a few suspect tubes, I checked them for filament continuity and plate to all other terminals for shorts, still an emission or Mu test would make me feel better. The base looks like a standard loctal base but no settings are on my tv-10 books or charts. Thanks in advance for the help. George

---

Date: Mon, 26 Jan 1998 15:10:13 -0600
From: Lee Blaske <lblaske@pclink.com>
To: boatanchors@theporch.com
Subject: SB-200 on WARC bands?
Message-ID: <v03110702b0f2abac1a27@[206.11.1.173]>

Has anyone tried using the SB-200 on 12 or 17 meters? Is the bandwidth wide enough? Which band settings would be best for 12 and 17?

Thanks.

Lee Blaske N0IZ

Date: Mon, 26 Jan 1998 16:31:15 -0500 (EST)
From: JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
To: boatanchors@theporch.com
Subject: RESISTOR IN 6H6 HEATER CIRCUIT, MORE.
Message-ID: <9801261631.aa01606@pcusa01.ecunet.org>

To: boatanchors@theporch.com

Halli in the SX-101A does a thing with the 12BY7 HF oscillator to reduce hum--it puts some DC bias on the filament.

The filament of the 12BY7 is powered by a separate transformer--the filament is continuously powered to enhanced osc. stability.

This transformer's secondary is left floating & is center-tapped. +27 VDC is fed to the center tap (via a voltage divider from the +150 VDC regulated line) putting DC bias on the filament.

This seems like a good trick to use on this kind of problem as it's easy to do. But if you put regulated DC on the HF osc fil, then this problem goes away.

They also use the other hum-reducing trick on the triple diode 6BJ7 (AM detector, ANL, AGC rectifier) with 3.4 ohms in series with the filament.

-John Sehring (written on Mon, Jan 26, 1998 at Custer, SD) UCC WB2EQG

Date: Mon, 26 Jan 1998 16:31:17 -0500 (EST)
From: JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
To: boatanchors@theporch.com
Subject: RE-FORMING ELECTROLYTIC CAPS
Message-ID: <9801261631.aa01621@pcusa01.ecunet.org>

To: boatanchors@theporch.com

I found this in the manual for a Sprague model TO-5 `Tel-Ohmike' capacitor analyzer (circa 1958).

This is for leakage testing of electrolytics:

"4.3 It will be noted that the voltage reading will tend to increase after a short time as the leakage current begins to decrease to a stable value. The [applied] voltage control should be retarded accordingly to prevent more than rated voltage from being applied to the capacitor. The measurement of leakage current should be made only after a stable value [of leakage current] is reached.

Capacitors which have been have been out of use for periods of a year or more make take as long as 30 minutes to reach a stable value of leakage current. Such capacitors usually have a high current initially and the [applied] voltage control should be retarded so that the leakage current is less than 10 ma. in order to prevent overheating of the capacitor internally. The voltage should be adjusted upwards until rated voltage is reached as the leakage current decreases. When rated voltage is finally reached, proceed as detailed above. If there is appreciable fluctuation in the leakagae current indication, the capacitor is probably intermittent and should be discarded.

4.4 Test Limits - New radio-TV type electrolytics should have a maximum

leakage current as shown in following table:

.... [long table here in text, use formula below instead]

Maximum leakage currents ... may be derived from the following formula:

$$I = kC + 0.5$$

where I is the leakage current in mA, C is capacitance in uF, and k is a constant as follows:

WVDC	k
3 to 100	.01
101 to 250	.02
251 to 350	.025
351 to 500	.04

Readings should be taken 5 minutes after capacitors are placed on rated DC Working Voltage. These limits may be used as a guide in judging whether capacitors should be replaced, making due allowance for the usual increase in leakage with age and with any high ambient temperature at which measurements are made. Capacitors with a leakage current of more than 15 mA should almost always be discarded."

On power factor (assuming you can measure it):

"2.4 Power Factor
2.4.1 DC Dry Electrolytics - The 60 cycle power factor of new capacitors will usually fall below the maximum value give below. Capacitors rated at 150 volts or higher shoud usually be replaced if the measured value is twice that given. Low voltage sections of multi-section capacitors will generally have power factors higher than that listed, sometimes by 50%.

WVDC	Max. New P-F
475-300	15
250	18
150	20
50	25
25	30
15	50
12	55
6	60 "

Interesting & comes from one of the largest capacitor manufacturers. Truly BA-type opinion.

-John Sehring (written on Mon, Jan 26, 1998 at Custer, SD) UCC WB2EQG

End of BOATANCHORS Digest 1893
****